Attorney Docket No. 87082/AEK Customer No. 01333

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Inventor(s):

Hwei-Ling Yau, et al.

Group Art Unit: 1794 Examiner: Betelhem

Shewareged

INKJET RECORDING ELEMENT AND METHOD

Serial No.: 10/795,836 Filed: March 08, 2004

Commissioner for Patents Alexandria, VA 22313-1450

Sir:

DECLARATION UNDER RULE 131

The undersigned, <u>Hwei-Ling Yau</u>, of Monroe County, New York, declares that:

She has received a B.S. Degree in Chemistry from the National Taiwan University in 1979 and a PhD Degree in Polymer Science and Technology from the University of Illinois at Urbana-Champaign in 1985;

She has been employed as a research scientist for Eastman Kodak Co. in the area of material science and design for various imaging systems since 1985 and is presently a Program Leader for research projects at Kodak;

She is a co-inventor in the above-captioned patent application, and her co-inventor, Wendy S. Krzemien, retired from Eastman Kodak several years ago and is not readily available at this time;

She is familiar with the references cited in the outstanding office action, and notes that all are obviousness rejections based on Gallo et al, US 2003/0107636 as the primary reference;

The attached Exhibits A, B, and C are pages from the laboratory notebook of co-inventor, Wendy S. Krzemien, which pages are dated prior to June 12, 2003, and witnessed. Exhibit A, notebook page 131, discusses the preparation of samples with fusible coatings for testing.

Exhibit B, notebook page 160, describes coating set "3165" which describes the coating of fusible coated samples that correspond to many of the examples in the present patent application. Such samples were sent immediately for swelling test typically within a day of coating and were sent for incubation and print quality, the results of which are reported in tabular Exhibit D, dated prior to June 12, 2003.

Exhibit C, notebook page 165, describes coating set "3200" which describes the coating of fusible coated samples that correspond to many of the examples in the present patent application. Such samples were sent immediately for swelling test typically within a day of coating and were sent for incubation and print quality, the results of which are reported in tabular Exhibit D, dated prior to June 12, 2003.

Exhibit D is a tabulation of the results of testing of data sets "3165" and "3200", dated prior to June 12, 2003. For convenience, the corresponding Example numbers in the application tables at pages 17 and 19 of the application have been added to the data lines of Exhibit D in circles where appropriate, so that the Examiner can verify that the values for the data in the samples of these exhibits correspond to the Examples in the application, and thus the invention results were appreciated and in the possession of the inventors prior to June 12, 2003.

The undersigned declares further that all statements made herein of the undersigned's own knowledge are true and all statements made on information and belief are believed to be true. These statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Hwei-ling Y

Date: Jan

EASTMAN KODAK COMPANY

Date____

\mathcal{S}	vv	\overline{A}				10	7	3			•	7				
Problem: <i>O</i>	00	<u> </u>					_/_	=					, 1		_	Τ_
	\top	T	Cto, Date:		'			•	• •	18	3000.0 EmMm(86/14), 753 nm, Cationic St.		51.29%	· · · ·	526.42	-2.66
' 1	ı	•	Satelight N				30000	acuma processorialità	CORPOR		600.0 W-320 40.0 Aerosol OT	FAC-2436A	.33.70% 10.00%	8.00	36.00	
		.,	Charge nun Support: 6P	mber: 700-8220 VF1-77 Clear Estat				le je	9:	11	3000,0 Erekiro(86/14), 753 nm, Cationic St. 600,0 W-320	DED 103102A Wilco	51.29% 33.70%	8,00	70.19 21.36	3.76
			Finish: 19				***		_		40.9 Pluronic L-44	BASF	69.60%		0.69	465
			58-1473		Material	1 1	Wet Load		Preparation	12	3000.0 EarlVm(86/14), 753 am, Cadionic St. 800.0 W-320	DED 103102A Wiles	51.29% 33.70%	8.00	70,19 21,36	حدد
			MeR No.	Composition (mg/tt2) 150.0 Gal-5	source get 55	15.00%	cc/R2	ut of polymer 15.09	61,69 -	- 10	40.0 Zoret FSN 3000.0 Estaten(86/14), 753 mm, Cationic St.	FAC-0029 DED103102A	40.00% 51.29%		1.20 70.19	3.61
				75.9 KoDy	POL-3174	24.00% 20.00%	8.00	8.04 28.13	1		500.0 W-320	Wilco	33.70%	8.00	17,80	
				375.0 PSZs 7.5 BVSM	HAR-3179	1.80%		6.25 0.90	c-edd prior to coming	-	100.0 ME72040 (wwx) 40.0 Zonyl FSN	Michelman FAC-0029	40.00% 40.00%		1,20	
			- -	6.0 10G 250,0 Gel-5	FAC-0555 gel-55	15.00%		25.00	59.19	14	3000.0 EmMm(86/14), 753 nm, Castonic St. 500.0 W-320	DED103102A Wilco	51.29% 33.70%	6.00	17.80	3.81
				75.0 XoDy 276.0 PSZs	POL-3174	14.00% 20,00%	8.00	8.64 20.63		-	100.0 ME98040M1 (wax) 40.0 Zonyi FSN	Michelman FAC-0029	40.00%			
				7.5 BVSM 6.0 10G	HAR-3179 FAC-0555	1.80%	ŀ	6,25 0,90	<- acid prior to coming	15	3000.0 EmMm(86/14), 753 nm, Cathoric SL	DED103102A	61.29%		70.19	2.81
			- 3	150,0 Gel-5	gel-55	15,00%	8.00	15.00 8.04	33.58		500.0 W-320 100.0 ML723	Wilco Michalman	33.70%	8.00	4.00	
		-		75.0 XoDy 375.0 BAsMn		10.00%	1	58.25			40.0 Zornyl FSN 3000,0 EmMm(86/14), 748 nm, Cultonic SI,	FAC-0029 DED103102C	40.00% 50.41%		1.20 71.41	2.02
				7.5 BVSM 6.0 10G	HAR-3179 FAC-0555	1,80%		6.25 0.90	e-add prior to coming		808.0 W-320	Yelloo	33.70%	00.B	21.36	
			4	250.0 Gel-5	gel-55	15.00% 14.00%	8,00	25.00 8.04	38.56	17	49.0 Zhanyi FSN 3000.0 Emilian (86/14), 642 nm. Cationic St.	FAC-0029 DED:100102D	40.00% S1.08%		70.48	2.96
				75.0 XeDy 275.0 BAsMn		10.00%		41.25 6.25			600.0 W-320 40.0 Zopyl FSN	FAC-0029	33.70% 40,00%	8.00	21.36 1.20	
_			T	7.5 8VSM 6.0 10G	HAR-3179 FAC-0655	10.00%	<u> </u>	0.90	76.71	. 1#	2900.0 KEd/ÆmMm/86/14), 750 nm, Caffon		46.80% 33.70%	8.00	74.36	-0.21
}	" ·	1.1.	5	50.0 Gel-5 75.0 NGP-03	gol-55 Nagase	15.00% 47.00%	8.00	15,00 2.39	79./1		590.0 W-520 40.0 Zonyi FSN	FAC-0029	40,00%	6,00	1.20	180.24
-	= = =			375.0 W-213 7.5 BVSM	Wilco HAR-3179	30.00%	ļ	18.75 6.25	c-add prior to coming	19	2800.0 B/Emilim(86/14), 613 tm, Calionic 560.0 W-320	CC0167-41B Wilco	44,60% 33,70%	8.00		-0.48
		 	!	6,0 10G	FAC-0555	10.00%	├ ─	20.00	74.21		40.0 Zonyi FSN	FAC-0029	40.00%			-0.47
4	2 2 3	111	·	206.0 Gel-5 75.0 NCP-03	gel-S5 Hagase	47.00%	8.00	2.39		*	2780.0 SH2(80/20), 749 rm, Calicale SL 556.0 W-320	CC0167-50B Wilco	44.20% 33.70%	6,00	19.80	3.37
	= = =			325.6 W-213 7,5 8VSM	Witto HAR-3179	30,00%	l	16.25 6.25	< add prior to souting	zi	40.0 Zonyt FSN 3000.0 Enulim(85/14), 878 nm, Californic SL	FAC-0029 CC0167-448	40.00% 53.10%			5.64
4		+++-		6,6 10G 150,0 Gel-5	FAC-0555 gel-55	15.00%	-	6.90 15,00	71.06	- "	600.9 W-320	WAtco FAC-0029	33,70% 40,00%	8.00		
	= = =		'	75.6 MO709	Wiles	14.00% 30.00%	8.00	8,04 18,75		22	40,0 Zonyl FSN 3000.0 Emillin(86/14), -940 nm, Calionic S	CC0167-63B	48.80%	\vdash	73.77	-0.34
-	E = 8		_	975.0 W-213 7.5 BVSM	HAR-3179	1.80%	1	6.25	-add prior to cooling		600.0 W-320 40.0 Zonyi FSN	FAC-0029	33.70% 40.00%	8.00		
•	-	-{		6,6 10G 200.0 Gal-S	FAC-0555 gel-55	10,00% 15,00%		20.00	68.56		1 400 EMB 1 501					·
	= = #			75.0 MO708 325.4 W-213	Wikoo	14.00%		8,64 16,25	١,							
:	= 7 2		l l	7.5 8VSM	HAR-3179 FAC-0586		1	6.25 0.90	c-add prior to confing							
-				6.9 10G 150.0 Gel-5	gei-55	15.00%		125.00	502.20	_						
•	2 2 E			75.0 XoDy 375.0 W-213	Wilco	14.00% 30,00%		66.96 156.25	1							
-	= 2 E			7.5 BVSM 6.0 10G	HAR-3179 FAC-0555			52.08 7.50	-add prior to coaling	ı						
			1	1 40 100	•	•										
-1	2 2 8				(((4) -		~~~~	ሳን ተለደ	: /K1) on	501	1873-10> -22 fro	m Car	on S	3750	printe	r. fuse
or school	= = 8		(1)	Print CC0027-127	(N4) a	uia C		27-10. 20/ DLJ) (IC1) OII	331	070-10 > 22 110	iii ou				,
—————————————————————————————————————	- <u>.</u>		and	send for dark kee	eping i	VV/30	3C/3C	J 70 MM	* ///4\ ~~	EC4	1072 10 22 fro	m Car	on S	3750	nrinte	r fuse
a delana A band y	2 2 3	_	(2) [Print CC0027-127	(K4) a	ına C	COO	2/-10:	o (KT) on	001	10/3-10> -22 110	nii Oai	1011	,, 50	printe	i, idoc
	# 5 g	- 8	and	send for dark kee	eping 1	W/38	3C/80)%HH				-1				
1	2 2 4 2 4	~	(3) f	for 5S1873-10	> -22, fi	use a	at the	tollow	ring cond	lition	using 1-inch samp	Jies:				
				300F/0.5 ips/	'60psi											
10 for all	± 2 €	~ £		280F/0.5 ips/												
Table of the control	2 2 3			280F/0.5 ips/	30psi											
To do a series	1-	- -		and if 280F/0	.5 ips/3	30psi	sho	w hazi	ness, fus	se ar	other set at 280F/	0.3 psi	/30 b	Si.		
inge (pyan pyan pyan pyan pyan pyan pyan pyan	s 5 %															
经营业专业	2 2 3	<u> </u>	- (4)	Ask Butch to load	CC002	27-10)5-K	1>K4	4 in bk. c	yan.	magenta, yellow o	artridg	es o	f Eps	on 88	0 print
		_	(T)	t ekull nicture on	5S1873	3-10	fuse	and c	heck on	dens	sity in Dmax area. I	f dens	ity is	up it	n 3.0 r	ange,
	8 5 =	2. g	Piili	t on -11 to -22.		,					,		-	•		-
	2 2 2	_ В	bin			1 1 2 7	inko									
			(5) [repeat (4) using C	,CUU2/	-121	HIVS	·	14							
*	1 2 3 3	18338			<u> </u>											
	9 2 2	1000			(<u>a</u>				-/5				·····			
	60.0	10 9. C.			7				16	~						
	2.5.5	Die Die			/				- 7							
	1	1		}	\$				_ 							
A EARDEE	18				<u> </u>				18	-	ı					
1	- I		1	1	1)O.	!		1 1	1	-	, [ŀ
	$oldsymbol{ol}}}}}}}}}}}}}}}}}}$				للطاء							1//				
KP 15226-6/00				<u> </u>	11				22		AV n n	K	0		4	^
RF 13220-0/00				Signature	<u></u>				27	\checkmark	they want	49	1			_
							-	\A7:4	ness	10	March.					
The f	orego	oing d	isclose	ed to me on				44 11:	11622	-c	//					

13.5 0	book Nø. C C C	02	7		Ri	E S	E A	RC	Н	/ D I	E V I	E L	O P	M E	E N T	*	-, (
		—			_		E	EASTM	IAN	KOD	AK Ç	OME	YNA							
:Date Prob	200	190			-			\preceq	1	6	\leq									
		1 1	1 1			_	T	T	- - 	V.		_	_	T						
Cig. Data Satisfyth Change r	1						ı	•						-	,	1	' l		<u>'</u>	
	8FF1-77 & Calypso (Day/Night support)	١				t No. Com	position (mg/R2) I-EO (WO-320)		Material source Nippon Ghos	conc.	Wel Los cc/ft2		58-	L _			Material	1	WerL
	Composition (mg/112)	Majorial	conc.	Wet Lo		- 1	100.0 XoO 400.0 W-2	ly 13		Wilco	14.90% 30.00%			- Met H	3000.0 En	+ 190, 808 nm,	Cationic St.	Source CC157-1376 Wilto	54,40%, 34,50%	8.0
'	250.0 Gel-4 100.0 XoDy 450.0 W-213	Gef-9808	11.687	7.00	7	11	20.0 DHC 6.0 10G 300.0 PVA			FAC-0555 Nippon Ghos	10.00% 10.00% 10.00%	1_	ļ	-	25.0 GP 20.0 Ze	-50-A(modified nyi FSN		FAC-0029	50.00% 40.00%	
	6.0 EVSM 6.0 10G	Wittoo HAR-3179 FAC-0555	30.00% 1.80% 10.00%		_		0.0 XoD 500.0 W-2	y 13		W/Roo	14.90%	7.00	<u> </u>	21	575.0 W-	1-100, 715 mm, 320 1-50-Al/modified		CC167-1278 Witco Genesee Polyme	50.70% 34.50% 50.00%	8.0
2	225.0 Gel-4 100.0 XoCy	Gel-9606	11.68% 14.90%	7.80	1 _		20.0 DHD 6.0 10G		_	FAC-0655	19.00% 19.00%			- 22	20.0 Zor		•	FAC-0029 CC167-77	40,00% 52.20%	L
-	475.0 W-213 6.0 BVSM 6.0 100	Wilco HAR-3179 FAC-0655	30.00% 1.80%	1	- '	1	25000 PVA 0.0 XoDy 550,0 W-21			Nippori Ghosi Witos	9.89% 14.90% 30,00%	7.00		-		-50-A(modified	l dimethyl siik			8.0
3	200.0 Gui-4 100.0 XoDy	Gal-9606	19.00% 11.68% 14.90%	7.00	 		20.0 DHD 6.0 10G	١		FAC-0655	10,00%	1		23	20.0 Zor 3000.0 Em 575.0 W-	-100, 742 nm,	Cationic St.	FAC-0029 CC187-1588 Wildo	40.00% 51.60% 34.50%	8.0
	500.6 W-213 6.0 BVSM	Wilco HAPI-3179	30.00% T.BO%		¬		0.0 XoDy			Nippon Ghose		7.00		-		-50-A(modified	dmeltyl siin			8.0
•	6,0 10G 200,0 Gef-4	FAC-0655 Gel-9606	10.00%	├	 		500,0 W-21 20.0 DHD 6,0 10G			₩āco	30.00% 10.00%	ı		24	3009.0 Em 575.0 W-	-100, 768 mm. 320		CC167-1608 Wilco	51.30% 34.50%	8.0
: 1	100.0 XeDy 500.0 W-213 10.0 SVSM	Wildo	14.90% 36.00%	7.00		4 3	00.0 Gel-5 0.0 XoDy			FAC-0555 gal-55	10,00% 14,63% 14,90%	8.00			20.0 Zor			FAG-0029	50.00% 40.00%	
5	5.0 (0G 300.0 Gel-4	FAC-0555 Gel-9606	1.80% 10.00% 11.68%		1	5	6.0 BVSN	3		Wiloo HAR-3179	30.00%			25	575.0 W-2	-100, ??? rm, 320 -50-A(modified		CC167-162B Wilco Genesae Polyme	52,00% 34,50% 50,00%	8.00
1	0.9 XoDy 500.6 W-213	Witco	14.90%	7.00		5 Z	6.0 10G 50.0 Gel 5		\dashv	FAC-0555 gal-55	10.00%	-	<u></u> -		20.6 Zon	nd FSM -100, ??? nra.	L.	FAC-0029 CC167-1648	40.00% 52.60%	
	6.0 BVSM 6.0 10G 290.0 Gel-4	HAR-3170 FAC-0565	1.80% 10.00%		1		0.0 XoQy 50.0 W-213 6.0 BVSW	3	İ	Wiles	14.90% 30.00%	8.90			575.0 W-3 25,0 GP	igo 50-A(modified		Wilco Geneses Polyme	34.50%	8.00
	0.0 XoDy 650.0 W-213	Gel-9606	14.90%	7.00	<u> </u>		6.0 10G 00.9 Gel-5	· · · · · · · · · · · · · · · · · · ·		HAR-3179 FAC-0555 gel-55	1.80% 10.00% 14.63%			27		100/BZF362 (96/5), ??? sm		40.00% 55,30%	_
	6.0 BVSM: 6.0 10G	Wilco HAR-3179 FAC-0555	30,00% 1,80% 10,00%			1	0.9 XoDy 00.0 W-213	3		Wiles	14.90%. 30.00%	8.00		_	575.0 W-3 25.0 GP- 20.0 Zon	50-A(modified	dimetryl stic	Witte Genesee Polyme FAC-0029	34.50% 50,00% 46,00%	8.00
1 7	200.0 Gel-4 0,0 XoDy	Gel-9636	11.68% 14.90%	7.00	†	_1	6.0 BVSM 6.0 10G			HAR-3179 FAC-0656	1.80% 10.00%			28		100/6ZF352 (1	97.5/2.5), ???	CC167-168B WNco	54.20% 34.50%	8.00
	600.0 W-213 6.0 BVSM 6.0 10G	Wikos HAR-3179	38.00% 1.80%		17	10	10.0 Gel-5 10.9 XeOy 10.9 W-213	•		gel-55	14.63%	4.00		-	25.0 GP- 20.0 Zon	50-A(modified yl_FSN		Genesee Polymer FAC-8029	50.00% 40.00%	
-	200.9 PVA-EO (WO-320) 100.0 XoOy	FAC-0556 Nippon Ghosel	10.00%			-	6.0 BVSM 6.0 10G	i		Wiles HAR-3179 FAC-0555	30,00% 1,80% 10,00%			29	575,0 W-3			Willoo	\$3.60% 34.50%	8 00
	500.0 W-213 20.0 DHD	Witte	14.90% 30.00% 10.00%	7.00	18	20	0.0 Gel-5 0.0 XoOy			gel-56	14.63%	8.00		30	20.0 Zon			Genesae Polymer FAC-0029	50,00% 40,00%	
-, -	6.0 10G 250.0 PVA-EO (WO-320)	FAC-0555 Nippon Ghosei	10.00% 10.00% 8.89%		-	1 1	10,0 W-213 10,0 BVSM		İ	Wittoo HAR-3176	39.00% 1.80%		·	- 30	575.0 W-3	20		DED 103 102F Witton Genesee Polymer	49.87%, 34.50% 50.00%	8.90
	100,0 KoDy 450,0 W-213	Witco	14.90% 30.00%	7.00	19	300		(95/5), 753 nm.	Cationic	FAC-0655 CC0125-78	10.00% 49.64%		-	31	20.0 Zon			FAC-0029	40 00%	
	20.0 DHD 	FAC-0666	10.00% 10.00%	[2	5,0 W-320 5,0 GP-50- 9,0 Zonyl J	A(modified dimer	thyl salico G		34.50% 50,00%	8.00		•	575.0 W-3 25.0 GP-	20 50-A(modified		Wilco Genesee Polymer	34,50% 50,00%	8.00
100	n= 2800 /0	2007	luk			, -	u.o godiji ,			PAU-0029	40.00%	'		31	20.0 Zory 3000.0 Emb	kn (95/5), 753	nm, Cationic		40.00% 49.64%	
-1	280 a /	2007	103	· 5	4125		100	0= Ca	صادر	~~ k	0250	30	مننم		575.0 W-3 25.0 GP-1 20.0 Zong	50-A(modified	dimethyl silic	Wilco Genesee Polymer FAC-0029	34.50% 50.00% 40.00%	8.00
200	0 = 30 070	070	7-00-	,			200	0=8	200	~12	80	Č	250-	.15	Q	,	ı	7770	1 10000 1	
300	0 = 380c/9 0 = 380c/8 0 = 1 W 1	ipm Oz	on	Cha	mbe	ب				·				150						
400	D = 1 0x H	10																		
								· · · · · · · · · · · · · · · · · · ·										·		
	Cig. Dater. Saladge: C Charge werehr: 206193	-Change throad corresponds.	_					te vertica/												
	Support: 6RF1-77, Dalyper (Day-Hight support) Dryer Setting: see diagram better Meximu speed: see diagram better	-Adjust air pres -Kesp hopper st -ALL coating do	: 40 C. Ionisiya CLO	SED.	ECO DA MERIK	E MF COUNTY ID	я миския,													
	Fleisk: handrells	-Turn CDT on to -Take out in-bet -Used displaces	weeks from t	bottom Jaya	ня до сопинич	top layer so	ook 419.													
	28-21-62 C	n eq es	<u> </u>	s s		* *	16	<u>n u</u>	11	14 15	34 17	10	19 20	27 22	71 24 	25 24	27 24	20 20	15	
	Organ all (C. B.S) F (: Toffstaf 18) machine speech & Strine											#	0 9 or 0 9 or 21	22 23 # 5 to 4 4 t		26 27 8600 #300	28 27 0 8 cc 0 4	50 35 to \$100 \$500	32 7 b m	
	1ed Pene Chillian JD. B./O F 107(26)* Doyse #1 (D. B./D F 107(10)* Dryne #2 (D. B./D F 745760)*	X1 2+X2 3+X5 700 0700 0700	4+34 5 - a 7 co	135 E+1		8 9 7 cc 87		11 12 87 cc 87 cc	13 6.7 cc	## - X16 5 - X15 # 3 00 # 8 00	48 - X16 17 - X								-	
	reachine speed to birmin.						No.	A SALASA				4								
	TER. Dyss	1900) 1912 was set at 785° by 17456.	Man.			•													estano estanos	
								wan						-						
,	1 . 1 .	1 .	i		1 .			·····		ı			1							
KD 1500			ــــــــــــــــــــــــــــــــــــــ		4				1	1-,		<u> </u>	,				\bot			
KP 15226)-U/U(J			Si	gnatu	re~	A	LL	<u></u>	al I	1	D	Sa	20		$\overline{}$		`		
	The foregoing c	licala	بدا			\smile		/	<u> </u>	<u> </u>	1	-1	1 TX	KH T	<u>~~</u>	سد		<u> </u>		
	egoing c	iiscloseo	10 0	ne o	n	7			Ď	Witpt	ésø			Hus	4					

The foregoing disclosed to me on

RESEARCH / DEVELOPMENT

165 Notebook No.CC 0027 EASTMAN KODAK COMPANY Date. blem: 2nd Pass (D.S.O.P.); TWENDS Doyse 21 (D.S.O.P.); TWENDS Doyse 22 (D.S.O.P.); TWENDS Doyse 22 (D.S.O.P.); TWENDS Doyse 21 (D.S.O.P.); TWENDS Doyse 21 (D.S.O.P.); TWENDS Doyse 22 (D.S.O.P.); TWENDS Doyse 22 (D.S.O.P.); TWENDS 100 0 XoDs Witos HAR-3179 30.00% 1,80% Frumber: 205191 pt: 69F1-77 I Beiling: use diagn Hite speed: use die Jahr: handrube 10.00% 48.54% 34.50% W 460 6,0 103 930,0 EmMin (96/5), 1 570.0 W-320 50.0 GP-50-A(m Wilco 50.00% Support 6AF1-77 20,0 Zonyt FSI 930.0 EnMin (90 FAC-0029 CC0125-70 40,00% 40,64% Wico 6.00 570.0 W-213 : Witten X-side he Then 0.06 gap I 50.0 GP-50-A(modi 20.0 Zonyl FSN 2930.0 Embler (95/5), 570.0 W-320 88F1-77 # FAC-002 CC0125-7 omposition (mg/ft2) 200.0 Gal-4 34.50% 50.00% 10.00% Wilco see Po 8.00 100.0 XoDy 500.0 W-213 14,90% 4.00 \$ 50.0 GP-50-A(mod Witco HAR-3179 FAC-0555 Gel-9608 0.0 BVSM 50.0 Allocha 1.80% ...Short threading in the conditioning ...Julius' of yearsum to needed in ch ...Julius' of yearsum to needed in ch ...Xeep happer at 40 C. ...Turn CDT on the coat both Please...Lload displacement jump for top in ...Sern 16 of each bottom layer, leep ...sea X-stries (n.4 16 gap) hopper for ... 20,0 Zonyi FSN 2930.0 Em-100 Ca 60,001 6.0 10G 200.0 Gel-2+¥2 !! = 34.50% 50.00% 12.00% 100.0 XoDs 578.0 W-320 14,90% 8.00 50 to GP-50-A/n 30.00% 1.80% 3 + X3 20.0 Zonyi F\$N 2830.0 EmP(97/3) 570.0 W-320 50.0 GP-50-A(m FAC-0029 CC167-180 40,00% HAR-3170 6.0 f0G 400.0 Gel 4 FAC-0555 Gel-9608 10.00% 34.50% 50.00% 800 8 8 4 X X 4 uasp for top layer. en leyer, keep them b s) hopper for bettom l 100.9 KoDy 300.0 W-320 6.0 BVSM ij 3 11 90% 8.00 40,00% 52,40% 20.0 Zanyi PSN 30.0 EmMin (86/14 FAC-0029 CC167-182 30.00% 30.00% 10.00% 12.00% Witten WICE HAR-3179 FAC-0565 Gel-9606 Wilto 8.00 570.0 W-320 50.0 GP-50-A 34.50% 50.00% . 5 × 35 2 × 35 = ļļ 40.00° 100.0 XoDy 500.0 W-320 6.0 BV5M 20.0 Zonyi FSN 30.0 Emilin (95/5) 14,90% 30,00% 1,80% 8.00 DED013H Ī * * X8 ļļ Witne 5 578.0 W-320 50.0 GP-50-A(I 6.00 HAR-3179 FAC-0555 Gel-9608 Willow 34,50% 6.0 10G 400.0 Gel-4 20.0 Zonel FSN 7+X7 ļļ = 400.0 W-213 6.0 GVSM Witto HAR-3179 8,00 FAC-0555 Gel-9606 8.0 10G 200.0 Gel-4 9 8 4 X8 10.00% 5 !! -2200 12.009 600,0 W-213 6.0 8VSM 6.0 10G 400.0 Gel-4 Wildo 30,00% 8.00 HAR-3170 . 8 !! 10.00% 400.0 W-320 Witto HARI-3179 86.0 0.x 30.009 6.00 6.0 8VSM 6.0 18G 200,0 Gel-4 11 1 80% 10,00% 12,00% 30,00% 1,80% FAC-0555 Gel-9606 2) Duk 9 9 8 11 × X11 600.0 W-320 Witto HAR-3179 11 8.09 6 D RVSM 6.0 19G 200.0 Gel-4 100.0 XoDy 500.0 W-213 0.0 BVSM 38°C/90%RH FAC-0565 Gel-9506 10.00% **9** 12 ļļ 14.90% 30.00% 8.00 38°C/80%RH 2000 = W Wilco HAR-3179 13 + X13 !! 1.80% 10.00% 11.67% 14.00% 2200 Co FAC-0665 K Keep Singles 98 80 FIX + X14 100.0 XoDy 9.00 100.0 W-320 Wittoo 33.70% 10.00% 60.0 DHD 6.0 10G 400.0 PVA (GH-23) 15 · X16 FAC-0555 Opon Ghos 10.00% 500/50% 100.0 XoDy 300.0 W-320 9.00 14.00% 16 + X16 Witco 33.70% 10.00% 40.0 DHD 45°C/5070RH 6.0 10G 355.6 PVA (GH-23) 10.00% 17 + X17 88.9 XoDy 266.7 W-320 11 14,00% 4.00 on Ca ~ 2200 33.70% Wittee Stall inage FAC-0566 Appon Gho Wilco . 2 5 5.3 10G 600.0 PVA (GH-23) 10.00% 11.67% 200.0 W-320 60.8 DHD 33,70% 10,00% **E**.O * 23 8 FAC-0565 open Ghes Witco 5,0 10G 400.0 PVA (GH-23) 10.00% 11.67% 33.70% of Alasery measure 3 400.0 W-320 <u>.</u> 8.0 60.0 DHD 60.0 DHD 6.0 10G 300.0 PVA-EO (WO-320) 100.0 XaDy 400.0 W-213 30.0 DHO 10.00% Repeats not 5 (F 10.00% 9.88% 14.30% FAC-0555 15 **2** 13 ã 8.00 30.00% 10.00% * 23 8 6.0 10G 200.0 PVA-EO (WO-320) ĕ !! FAC-055 10,00% 9,89% 14,90% 100.0 XaOy 500.0 W-213 8.00 e 2 11 30,00% 20.0 DHD 6.0 10G FAC-0555 5226-6/00 Q Signature

îtness

Cig. Dale: Safelight: Winne Charge number; Support: 6RF1-77 & Cellypso (Day/Night support) Exhibit D

Finish	: handrolls										lused at 300F/9.5ips/60ts	i fused at 300F/0.5lpa/60psi	
5S-31		Material	G	Material	Ctg Quality	swell of bottom layer (mils)			swell	cracks	Image quality Epson 820	stain resistance 5 min. Ponceau red	Maridrel test 6.16 mm
1	Btm Layer (mg/ft2) 250.0 Gel-4	Gel-9606	Puelble Layer (mg/ft2) 3000.0 EmMm (95/5), 753 nm, Cationic	source CC0125-76	Quality	(mis)	(ums)	absorbed by 1 ft2 of coating	prwzierwt ot dry i	ayar	almost no bleed	no stain	6.16 RM
·	100.0 XoDy	1	575.0 W-320	Witco	some crecks	0,28	7.112	0.65	0,816	1		very faint haze	fair
	450.0 W-213	Witco HAR-3179	25.0 GP-50-A(modified dimethyl silico 20.0 Zonyi, FSN	FAC-0029	not very obvious							i	
	6,0 106	FAC-0555	·										
2	225.0 Gel-4 100.0 XoDy	Gel-9606	as 01		no cracks	0.2	5.08	0.47	0.583	-1	no bleed	no stain very faint haze	lair
	475.0 W-213	Witco			some air bubbles						l	'	
	6.0 BVSM 5.0 6.0 10G	HAR-3179 FAC-0555											
3	200.0 Gel-4	Gel-9606			,						almost no bleed	no stain	
	100.0 XoDy 500.0 W-213	Witco	as 01		no cracks some air bubbles	0.14	3,556	0,33	0.408	-1		very faint haze	fair
	0.0 04000	HAR-3179	1										
4	6.0 10G 200.0 Gel-4	FAC-0555 Gal-9606							1		no bleed	no stain	
" [100.0 XoDv 📝 🥆		as 01		no cracks	0.17	4.318	0.40	0.496	-1		slight haze	fair
	500.0 W-213	Witco HAR-3179			some air bubbles								
	6.0 10G	FAC-0555											
5	300.0 Gel-4 500.0 W-213	Gel-9606 Witoo	as Q1		no cracks	0,16	4.064	0.37	0.466	-1	very slight bleed	no stain slight haze	
	6.0 BVSM	HAR-3179	as 01	1	some air bubbles	5,10	4.004	0.37	0.400	"		aight nage	
_	6,0 10G	FAC-0555					!						
6	250.0 Gel-4 550.0 W-213	Gel-9606 Witco	as C1		no cracks	0.23	5.842	C.54	0.670	-1	very slight bleed	no stain slight haze	
	6.0 BVSM	HAR-3179			some air bubbles]				
7	6.0 10G 200.0 Gel-4	FAC-0555 Gel-9606							 		very slight bleed	no stain	
۱ .	600,0 W-213	Witco	as C1		no cracks	0.44	11.176	1.03				slight haze	
	6.0 BVSM 6.0 10G	HAR-3179 FAC-0555			some air bubbles				1.283				
8	200.0 PVA-EO (WO-320)		el						0.000		very slight bleed	light stain	
	100.0 XoDy 500.0 W-213	Witco	as 01		appears to be flow after coating	0.23	5,842	0.54	0.670	-1	some small cracks hazier than gelatin	hazy	
	20.6 DHD									ŀ			
9	6,0 10G 250,0 PVA-EO (WO-320)	FAC-0555	<u> </u>							 	very slight bleed	light stain	
1	100.0 XoDy	l			appears to be	0.23	5.842	0.54	0,670	-1	some small cracks	hazy	
	450.0 W-213 20.0 OHD	Wilco	as 01		flow after coating						slightly hazier than ge		
	6.0 10G	FAC-0556				_							
10	300.0 PVA-EO (WO-320)	lippon Ghos			some cracks	0.41	10.414	0.98	1.196	1	very slight bleed lots of small cracks	light stain hazy	
	100.0 XoDy 400,0 W-213	Wilco	as 01		not very obvious	U,4·1	10.414	0.50	1.150	l '	IUIS OF SIZIBIL CHECKS	l leady	
	20.0 DHD											i	
11	6,0 10G 300.0 PVA-EO (WC-320)	FAC-0555 Jupon Ghos									very slight bleed	light stain	
	500.0 W-213	Wilco	as 01		cracks	0,3	7.62	0.70	0.874	1	lots of small cracks	hszy	
	20,0 DHD 6,0 10G	FAC-0555			not very obvious						İ		
12	250.0 PVA-EO (WO-320)	lippon Ghose							. ; . g . a select year Agree 19 of . a'	100 agran agran (1970)	very slight bleed	light stain	
	550.0 W-213 20.0 DHD	Witco	as 01		appear to be flow after coating	0.27	6.858	0.63	0.787		some small cracks	hazy	
	6.0 10G	FAC-0555			non and code ig								
13	200.0 PVA-EO (WO-320) 600.0 W-213	äppon Ghose Witco	ei I as O1		appear to be	0.26	6.604	0.61	0.758	SHIRINGCUS.	very slight bleed some small cracks	very light stain hazy	
	20,0 DHD		as ut		flow after coating	0.20	0.004	1 0.01			ocine anom crassa	11029	
14	6.0 10G 300.0 Gel-5	FAC-0565 gel-55									very slight bleed	very light stain	
' *	500.0 W-213	yer-oo Wilca	as 01		some cracks	0.4	10.16	0.93	1,166	1	some small cracks	hezy	fair
	6.0 BYSMIC	HAR-3179 FAC-0565											
15	6.0 10G 250,0 Gel-5	gel-56									slight bleed	very light stain	
Į	550.0 W-213 / 6.0 BVSM	Witco	as 01		very mild cracks air bubbles	0.24	6.096	0,56	0.700	1		hazy	lair
ŀ	6.0 BVSM	HAR-3179 FAC-0555			an odubies							.	
16	200.0 Gel-5	gel-55			some air bubbles		4 1111	0.44	0.554		slight bleed some cracsk on sides	almost no stain	
	500.0 W-213 6.0 BVSM	Witco HAR-3179	as 01		no cracks	0.19	4.826	0.44	0.554	-1	some cracsk on sides	ha2y	fair
	6.0 10G	FAC-0565									albaha biraa a	almost c!-	
17	200.0 Gel-5 100.0 XoDy	gel-55			eracks	0.3	7.52	0.70	0.874	1	slight bleed some cracek on sides	almost no stain hezy	
	500.0 W-213	Witco	as 01		not obvious	.=							
l	6.0 BVSM 6.0 10G	HAR-3179 FAC-0555			air bubbles								
18	200.0 Gel-5	gel-55			11.75						alight bleed	almost no stain	
l	100.0 XoDy 500.0 W-213	Witco	as 01	i	air bubbles no cracka	0.14	3.556	0.39	0.408	-1	some cracsk on sides	hazy	fair
	10.0 BVSM	HAR-3179	 -					į					
PER PER PER PER PER PER PER PER PER PER	6.0 1DG	FAC-0555		MATERIAL DESCRIPTION OF THE PARTY OF THE PAR	THE RESEARCH TAXABLE TAXABLE TAXABLE TAXABLE TAXABLE TAXABLE TAXABLE TAXABLE TAXABLE TAXABLE TAXABLE TAXABLE T					ANN CASTANGE		58/C/X/C/X/C/X/C/X/A/A/C/X/A	
59-320	ig Bottom Layer (mg/ft2)	Material source	Top Layer (mg/lit2)	Material source	Ctg						Image quality Epson 820	stain resistance 5 min.Ponceau red	
1		354100	2930.0 EmMm (96/5), 753 nm, Cationic .	CC0125-76							good		
	no bottom layer		570.0 W-320 50.0 GP-50-A(modified dimethyl silico	Wites Genesee Polyme:	:						very little bleeding	no stain very slight haze	poor (delaminated)
\perp			20.0 Zonyl FSN	FAC-0029								,,	,
2	200.0 Gel-4 100.0 XoDy	Gel-9606	as 01		!	0.28	7.112	0.65	0.816	-1	slight bleeding	no stain	
I	500.0 W-213	Witco			·					'	cracks in	very slight haze	
	0.0 BVSM 6.0 10G	HAR-3179 FAC-0555									fused image		
5	200.0 Gel-4	Gel-9606									slight bleeding		
1	100.0 XoDy	ua	as C1		cracks	0.22	5.588	0.51	0.641	1	hazy	no stain very slight haze	
	500.0 W-320 6.0 BVSM	Wilco HAR-3179							İ		coating flaked off easily before fusing	very slight naze fused sample	
\perp	6.0 103	FAC-0555										is slightly haze	
6	400.0 Gel-4 400.0 W-213	Gel-9606 Witco	as 01		cracks	0.32	8.128	0.75	0.933	1	slight bleeding	no stain	
ļ	6.0 BVSM	HAR-3179				J.J.	2.120	0	2,000	.	cracks	very slight haze	
	6.0 10G	FAC-0555										'	
7	200.0 Gel-4 600.0 W-213	Gel-9606 Witco	as 01		fine cracks	0.16	4.064	0.37	0.466	s	slight bleeding	no stain	
	6.0 BVSM	HAR-3179			not obvious						cracks in high ink area		
B	6.0 10G 400,0 Gel-4	FAC-0555 Gel-9606									some bleeding	no slain	
-	400.0 W-320	Witco	as 01		cracks	0.77 Page	1 of 2 19.558	1.80	2.245	1	cracks	very slight haze	

· ethali:

-	6.0 SVSM 6.0 10G	HAR-3179 FAC-0555										fused sample is slightly haze	
+	200.0 Gel-4	Gel-9606						+		 	some bleeding	no stain	
					cracks	0.25	6.35	0.58	0.729	1	cracks	very slight haze	
П	600.0 W-320	Witto	as 01		CTACKS	U.25	0.00	0.86	0.728	' '	CHACKS		
П	6.0 BVSM	HAR-3179										fused sample	
	6.0 10G	FAC-0555										is slightly haze	
Т	200.0 Gel-4	Gel-9606									slight bleeding		
ı	100,0 XoDy	ŀ	as 01		small cracks	0.35	8.89	0.82	1.020	1	oracks	no stain	
ı	500.0 W-213	Witco										very slight haze	
ı	0.0 BVSM	HAR-3179											
ı	6,0 10G	FAC-0555											
t	600.0 PVA (GH-23),	ippon Ghos	u	_								no stain	
1	100.0 XoDy	hibbon caros	as 01		cracks	0.41	10,414	0,98	1,195	1	slight bleeding	very slight haze	lair
1		l	as u1		UTACAS	0.41	10,414	0,00	1,130	1 '	cracks	lused sample	1841
1	100.0 11 020	Wilco									Claudes		
1	60.0 DHD											is slightly haze	
1	6.0 10G	FAC-0555											
Т	400.0 PVA (GH-23)	lippon Ghos)İ								1	no stain	
1	100.0 XoDy	1	55 01		cracks	0.4	10.16	0.93	1.166	1	very little bleeding	very slight haze	fair
Т	300.0 W-320	Witco									cracks	luised sample	
ì	40.0 DHD										1	is slightly haze	
	6.0 10G	FAC-0655					1				ľ l		
+	355,6 PVA (GH-23)	ippon Ghos		_				1		 	† 	no stain	
П		appoil Glios	l as Of		cracka	-0.31	-7.874	-0.72	-0.904	1 1	noticable bleeding	very sight haze	
Т	88.9 XoDy	l	as o:		CIACKS	-0.31	-7,074	1 30.72	~0.304				
	266.7 W-320	Witco			1				1		cracks	tused sample	
	O.O DHD								1			is slightly haze	
	5.3 10G	FAC-0555								<u> </u>			
П	600,0 PVA (GH-23)	appon Ghos-	i				I					no stain	
	200.0 W-320	Witco	as 01		fine cracks	0.35	8.89	0.82	1.020	1.00	slight bleeding	very slight haze	
	60.0 DHD									1	high ink area cracked	fused sample	
	6.0 10G	FAC-0565								l sr	nd flaked off when IR dri	is slightly haze	
5	400.0 PVA (GH-23)	ippon Ghos						 		_		no stain	
۱ "	400,0 W-320	Witco	as 01		cracks	0.21	5,334	0.49	0.612	1.00	alight bleeding	very slight haze	
		***************************************	as UI		LIGURA	0,21	1 5.554	1 5.45	4.012	1,000	high ink area cracked	rolf organitores	
	60.0 DHD	1								l	ings and area diabled in ad flaked off when IR drie		
_	6.0 10G	FAC-0565								a	ia nakeo on when its one	· · · · · · · · · · · · · · · · · · ·	
ïT	400.0 Gel-4	Gel-9606									l		
	100.0 XoDy		as 01		ctg lost	0.41	10,414	0.96	1.195		no sample		
- 1	300.0 W-213	Wilco			1								
	6.0 8VSM	HAR-3179			1								
- 1	6.0 10G	FAC-0555											
ALC: N	THE RESIDENCE OF THE PROPERTY OF THE PARTY O	THE PERSON NAMED IN COLUMN			THE RESERVE OF THE PARTY OF THE	CONTRACTOR OF THE PARTY OF THE				CANNER CONTROL OF	Image Quality		
25		Material		Material	Ctg								
	tm layer (mg/ft2)	source	Top Layer (mg/ft2)	source	Quality					⊢	Epson 820		
	350.0 Gel-4	Gel-9606			l i							,	fair
1	650.0 W-213	Witco	as 01		some cracks	0.29	7.366	0.68	0.676	1.00	some bleed		
1	10.5 BVSM	HAR-3179									1		
1	6.0 10G	FAC-0555									1		
1	400,0 Gel-4	Gel-9606											
	000 0 111 040	Witco	as 01		some cracks	0.36	9.144	0.84	0.840	1,00	some bleed	1	fair
	12,0 BVSM	HAR-3179										•	
ì	6.0 10G	FAC-0556									ľ		
1	0.0 1003 *****	Gel-9606			-						 		
1			İ		room for:t-	0.23	5,842	0.54	0.536	-1.00	some bleed		tai
1	300.0 Gel-4		04		very lew cracks	0.23	0.042	V.54	0.336	1 .1.50	SUTTRE DIESEU	,	181
1	300.0 Gel-4	Witco	es 01				1			1			
-	300.0 Gel-4 700.0 W-213 10.5 BVSM (\)	Witco HAR-3179	es 01					1					
-	300.0 Gel-4 700.0 W-213 10.5 BVSM 6.0 10G	Witco HAR-3179 FAC-0565	es 01										
-	300.0 Gel-4 700.0 W-213 10.5 BVSM 6.0 10G	Witco HAR-3179 FAC-0565 Gel-9606											
-	300.0 Gel-4 700.0 W-213 10.5 BVSM 6.0 10G 250.0 Gel-4 750.0 W-213	Witco HAR-3179 FAC-0565 Gel-9606 Witco	es 01 as 01		no cracks	0.21	5.334	0.49	0.490	-1,00	some bleed	į	fai
-	300.0 Gel-4 700.0 W-213 10.5 BVSM 6.0 10G	Witco HAR-3179 FAC-0565 Gel-9606			no cracks	0.21	5.334	0.49	0.490	-1,00	some bleed	i	fai
-	300.0 Gel-4 700.0 W-213 10.5 BVSM 6.0 10G 250.0 Gel-4 750.0 W-213	Witco HAR-3179 FAC-0565 Gel-9606 Witco			no crecks	0.21	5.334	0.49	0.490	-1,90	some bleed	į	fai
	300.0 Gel-4 700.0 W-213 10.5 BVSM 8.0 10G 250.0 Gel-4 750.0 W-213 7.5 BVSM 6.0 10G	Witco HAR-3179 FAC-0565 Gal-9606 Witco HAR-3179 FAC-0555			RO Cracks	0.21	5.334	0,49	0.490	-1.00	some bleed	į	fail
	200.0 Gel-4 700.0 W-213 10.5 BVSM 6.0 10G 250.0 Gel-4 750.0 W-213 7.5 BVSM 6.0 10G 250.0 Gel-4	Witco HAR-3179 FAC-0565 Gal-9606 Witco HAR-3179 FAC-0556 Gal-9606	as 01									į	
<u> </u>	300.0 Gel-4 700.0 W-213 10.5 BVSM 6.0 10G 250.0 Gel-4 75.0 BVSM 6.0 10G 250.0 Gel-4 6.250.0 Gel-4 6.250.0 W-213	Witco HAR-3179 FAC-0565 Gal-9606 Witco HAR-3179 FAC-0555			no craoks	0.21	5.334 8.636	0.49 0.79	0.490	1.00	some bleed	į	
	300.0 Gel-4 700.0 W-213 10.5 BVSM 6.0 10G 250.0 Gel-4 750.0 W-213 7.5 BVSM 6.0 10G 250.0 Gel-4 625.0 W-213	Witco HAR-3179 FAC-0565 Gel-9606 Witco HAR-3179 FAC-0566 Gel-9606 Witco	as 01									i	fair feir
	300.0 Gel-4 700.0 W-213 10.5 BVSM 6.0 10G 250.0 Gel-4 75.0 BVSM 6.0 10G 250.0 Gel-4 6.250.0 Gel-4 6.250.0 W-213	Witco HAR-3179 FAC-0565 Gal-9606 Witco HAR-3179 FAC-0556 Gal-9606	as 01									i	